

REMARKS

In the present application, claims 1-14 are pending. Claims 1-14 are rejected by the Examiner under 35 U.S.C. §103(a). In view of the foregoing, Applicants respectfully request reconsideration of the application.

Rejection Under 35 U.S.C. §103(a)

In paragraph 3 of the Office Action, claims 1, 7, and 11-14 are rejected under 35 U.S.C. §103(a) as being unpatentable over Nguyen (U.S. Patent 6,308,189) in view of Moore (U.S. Patent 4,786,893). Applicants respectfully traverse this rejection.

The Office Action recites that “implementing Nguyen such that the barrel shifters are directly coupled to the multiplexers, as taught by Moore, will remove the delay associated with the AND gates and allow the Nguyen system to operate faster.”

In MPEP 2143.01 entitled “Suggestion or Motivation to Modify the References,” if proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.

In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed Cir. 1984)

Nguyen discloses vector word shifting. FIGS. 3 and 4 in Nguyen disclose an example for a 128 bit vector word shift. In FIG. 3, each of the barrel shifters 301-304 contains 32 bits of the 128 vector word that is shifted by m bits. (col. 5, line 65 – col. 6, line 5) The AND gates 321-326 and 335-336 in Nguyen between the barrels shifters 301-304 and the multiplexers 337-340 are for the clear masks 327-330 and the adjacent 32 bit words for a left or right shift. (col. 6, line 63 – col. 7, line 18; col. 8, line 10 – line 44). The AND gates 321-326 and 335-336 are to

“AND” the adjacent 32 bit word with the clear mask to result in the outputs 425A-432A depicted in FIG. 4. In one example, the clear mask results in a ‘0’ in 425A, while the m-bits of the adjacent word is in 426A.

If the AND gates 321-326 and 335-336 are removed as the Examiner suggests, there would be no clear mask to remove the unwanted bits in a shift, which would corrupt the integrity of the shifted word. For example, the remaining bits in 425A of the shifted vector word would be corrupted. Consequently, because of the corrupted word, the intended purpose of Nguyen for vector word shifting would then be unsatisfactory. Therefore, there is no suggestion or motivation to remove the AND gates 321-326 and 335-336 in Nguyen by combining the teaching of Moore of the barrel shifters directly coupled with the multiplexers.

Additionally, Moore teaches conversion of a serial bit stream representative of a composite color video signal to Red Green Blue (RGB) control signals. (Abstract). One skilled in the art would not have combined Nguyen with Moore because the vector word shifting of Nguyen and the video signal conversion of Moore are two separate, unrelated functions. Therefore, claim 1 is allowable for the above stated reasons over Nguyen and Moore.

Claims 7 and 14 are rejected for the same reason as claim 1 of “implementing Nguyen such that the barrel shifters are directly coupled to the multiplexers, as taught by Moore, will remove the delay associated with the AND gates and allow the Nguyen system to operate faster.” Thus, the above stated arguments for claim 1 also apply to claims 7 and 14.

Claim 11 depends directly from claim 7 and is therefore allowable for at least the same reasons as claim 7. Claims 12 and 13 depend directly from claim 1 and are therefore allowable for at least the same reasons as claim 1.

In paragraph 4 of the Office Action, claims 2, 3, and 5 are rejected under 35 U.S.C. §103(a) as being unpatentable over Nguyen (U.S. Patent 6,308,189) in view of Moore (U.S. Patent 4,786,893) and further in view of Cheng (U.S. Patent 4,528,664). Claims 2, 3, and 5 depend either directly or indirectly from claim 1 and are therefore allowable for at least the same reasons as claim 1.

Additionally in regards to claim 2, Cheng discloses a call progress signal monitor that detects call progress tones and silence. Col. 3, lines 51-68 in Cheng does disclose a time division multiplexing (TDM) format. However, Applicants fail to see how one skilled in the art would combine Cheng's call progress signal monitor with Nguyen's vector word shifting because the two systems are not related to each other. Furthermore, combining TDM with vector word shifting does not logically produce a more efficient system. Instead, shifting a word in TDM format may result in adversely affecting the synchronicity of TDM. Thus, Applicants fail to see any benefit in shifting a TDM word. Therefore, absent any logical reason to combine Nguyen and Cheng, claim 2 is allowable for the above stated reasons.

Claims 3 and 5 depend either directly from claim 2 and are therefore allowable for at least the same reasons as claim 2.

In paragraph 5 of the Office Action, claim 6 is rejected under 35 U.S.C. §103(a) as being unpatentable over Nguyen (U.S. Patent 6,308,189) in view of Moore (U.S. Patent 4,786,893) and further in view of Baker (U.S. Patent 6,347,344).

Claim 6 depends either directly from claim 1 and is therefore allowable for at least the same reasons as claim 1.

In paragraph 6 of the Office Action, claims 4, 8, and 9 are rejected under 35 U.S.C. §103(a) as being unpatentable over Nguyen (U.S. Patent 6,308,189) in view of Moore (U.S. Patent 4,786,893) and further in view of Phelps (U.S. Patent 4,512,018).

Claim 4 depends directly from claim 1 and is therefore allowable for at least the same reasons as claim 1.

Claims 8 and 9 depend directly from claim 7 and are therefore allowable for at least the same reasons as claim 7.

In paragraph 7 of the Office Action, claim 10 is rejected under 35 U.S.C. §103(a) as being unpatentable over Nguyen (U.S. Patent 6,308,189) in view of Moore (U.S. Patent 4,786,893), Phelps (U.S. Patent 4,512,018), and Baker (U.S. Patent 6,347,344).

Claim 10 depends directly from claim 7 and is therefore allowable for at least the same reasons as claim 7.

CONCLUSION

In view of the above remarks, Applicants believe that the rejections in the Office Action are fully overcome, and the application is in condition for allowance. If the application is not in condition for allowance, Applicants will expect a call from the Examiner as agreed upon the Examiner interview call on May 21, 2004. The Examiner is invited to call Applicants' representative at the number below if he has any questions or if there are remaining outstanding issues.

Respectfully submitted,

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Date: August 13, 2004

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